



Safety Alert

From the International Association of Drilling Contractors

ALERT 98-24

The Millenium Bug

THE PROBLEM:

On 1 January 2000, every computer -- and computer chip -- in the world will need to recognize that the 1900s are a thing of the past. Many will need to be reprogrammed, since original coding often used only two digits for the year. This design flaw means that computers may not distinguish whether 00 means 1900 or 2000, which may lead to possible shutdowns, inaccurate data and faulty calculations. This is often referred to as "The Y2K Problem," or "Millenium Bug." Fixing the problem may be painstaking and labor intensive; not fixing it may be worse. Serous safety and health problems are among the many concerns facing employers, employees and governments worldwide. These issues should be addressed as quickly as possible.

WHAT CAN GO WRONG:

Computer chips are embedded in all kinds of equipment. Machinery or processes that are computer-controlled could fail or malfunction after 1999 turns into 2000. For example, the U.S. Occupational Safety & Health Administration (OSHA) reports that, after testing, an oil company discovered that an offshore rig would shut down because an embedded chip misunderstood the date change.

ITEMS TO EVALUATE:

- Controllers
- Alarms
- Lighting
- Robotic devices
- Air monitoring equipment
- Hazard communications databases
- Heating and air conditioning
- Storage tank monitors
- Security Systems
- Elevators
- Generators

CORRECTIVE ACTIONS:

- Check all systems to identify those that contain time-sensitive logic controls.
- Evaluate that equipment to determine whether the computer chips can handle the date change.
- Fix or replace equipment that is not capable of handling the date change.
- Verify that the updated system works properly

The Corrective Actions stated in this alert are one company's attempts to address the incident, and do not necessarily reflect the position of IADC or the IADC HSE Committee.

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